

The trusted value of OSRAM Digital Systems continues with Inventronics Global – where experience meets innovation.

## OTi DALI 160/220-240/48 1CH

Optotronic Intelligent - 48 V DALI



### Product family features

- Dimmable via Touch DIM
- 50 m load cable with EMI validated
- Dimming range: 0.1...100 %
- Line frequency: 0 Hz | 50 Hz | 60 Hz

### Product family benefits

- Intelligent power matching thanks to Smart power supply
- Form factor for mounting on the cove or in luminaires
- No stroboscopic effect thanks to patented high PWM frequency management (> 2 kHz)
- Suitable for installation in emergency lighting systems according to EN 60598-2-22
- DALI message detection "LED Module failure"
- DALI part 251-252-253
- IP rating: IP20

### Areas of application

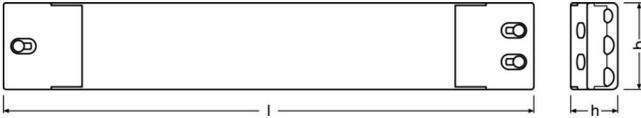
- Cove lighting, wall washer, corridor, handrail, luminous ceilings
- Suitable for use in luminaires of protection class I and II

## Technical data

## Electrical data

Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	198...264 V
Input voltage DC	176...276 V
Total harmonic distortion	< 5 %
Power factor $\lambda$	> 0.98
Efficiency in full-load	95 %
Inrush current	70 A
Max. ECG no. on circuit breaker 10 A (B)	4
Max. ECG no. on circuit breaker 16 A (B)	6
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	48.2 V
U-OUT (working voltage)	48.2 V
Output PSTLM	<1
Output SVM	<0.4
Nominal output power	0...160 W
Maximum output power	160 W
Galvanic isolation	SELV
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	Double
Networked standby power	<0.30 W

## Dimensions & weight



<b>Length</b>	300.0 mm
<b>Width</b>	50.0 mm
<b>Height</b>	35.0 mm
<b>Mounting hole spacing, length</b>	258.0 mm
<b>Cable cross-section, input side</b>	0.5...2.5 mm <sup>2</sup>
<b>Cable cross-section, output side</b>	0.5...2.5 mm <sup>2</sup>
<b>Wire preparation length, input side</b>	6.0 mm
<b>Wire preparation length, output side</b>	6.0 mm
<b>Product weight</b>	416.00 g

## Colors & materials

<b>Casing material</b>	Plastic
<b>Product color</b>	White

## Temperatures & operating conditions

<b>Ambient temperature range</b>	-20...+50 °C
<b>Maximum temperature at tc test point</b>	80 °C
<b>Max.housing temperature in case of fault</b>	110 °C
<b>Temperature range at storage</b>	-25...85 °C
<b>Permitted rel. humidity during operation</b>	5...85 %

**Lifespan**

<b>ECG lifetime</b>	50000 h
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**Additional product data**

<b>Encapsulated</b>	No
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**Capabilities**

<b>Programming interface</b>	DALI - 2
<b>Dimmable</b>	Yes
<b>Dimming interface</b>	DALI-2
<b>Dimming range</b>	0.1...100 %
<b>Dimming method</b>	Pulse Width Modulation
<b>DALI-2 Diagnostic Data</b>	Yes
<b>DALI-2 Energy Data</b>	Yes
<b>Suitable for fixtures with prot. class</b>	I / III
<b>Suitable for emergency lighting</b>	Yes
<b>EL DC detection selectable</b>	Yes
<b>EL EOFi – default value</b>	0.15
<b>Type of connection, input side</b>	Screw terminal
<b>Type of connection, output side</b>	Screw connection
<b>Suitable for through-wiring</b>	No
<b>Number of channels</b>	1
<b>Overheating protection</b>	Yes
<b>Overload protection</b>	Yes
<b>Short-circuit protection</b>	Yes
<b>Intended for no-load operation</b>	No
<b>No-load proof</b>	Yes

**Programming**

Tuner4TRONIC	Yes
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**Programmable features**

DALI Settings	Yes
DALI-2 Luminaire Data	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes

**Certificates & standards**

Approval marks – approval	CE / ENEC 10 / VDE-ENEC / CCC / BIS / EL / MM / RCM
Type of protection	IP20

**Environmental information**

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	13-08-2025
Primary Article Identifier	6977770432499
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	243b0d00-3013-44fe-be45-5eef960f1df7
SCIP_ID	

**Equipment / Accessories**

- Suitable for 48 V LED modules

### Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

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### Download Data

File		
Product Datasheet	PDF	▶OTi DALI 160 48 1CH TDS 070425
User instruction	PDF	▶OTi DALI 160 24 1CH UI G15130630 300625

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
6977770432499 INVENTRONICS	OTi DALI 160/220-240/48 1CH	Shipping carton box 20 Pieces	335 x 268 x 167 mm	14.99 dm <sup>3</sup>	431.90 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit